

## **Quality Review of Personal Wealth National Statistics**

HMRC (formerly the Inland Revenue) has published statistics on the distribution of personal wealth held by residents of the UK since 1962. These statistics are based primarily on the “estates multiplier” method; broadly speaking they make use of the information about individuals’ assets revealed from the probate or Inheritance Tax process to provide estimates of the wealth held by the living. More details of the methodology are provided in the introductory note to the statistics (available on the HMRC website), and in the short Annex to this note, which was originally published as part of the consultation.

HMRC instigated this review because the quality of the statistics had not been assessed for a considerable period. The review has attempted to document, summarise and assess the key aspects of the methodology and the tables produced. A consultation with users of the statistics was also undertaken. This note summarises the key findings and recommendations from the Review.

### **Alternative Approaches**

The review compared the current estates multiplier method with two principal alternatives for producing statistics on the distribution of wealth. The first of these, the Income Multiplier approach, uses data on income declared by taxpayers within Self Assessment to estimate the value of underlying assets. The second alternative approach is to ask individuals about their wealth holdings via household or individual surveys.

The review found that the income multiplier approach remains inferior to that of the current method, both in terms of the proportion of the population covered – only around 9 million people are within Self Assessment – and the types of assets covered – only assets yielding taxable income (or gains) are captured in the data. We were though able to make some improvements to the approach by including details from Third Party Information on the value of tax-free savings.

We also looked at the extent to which evidence from existing surveys might be used to assess the distribution of personal wealth. Our conclusion was that there does not yet exist a sufficiently robust, reliable and comprehensive survey which could be used to replace the current methodology. However, the new ONS Household Assets Survey is intended to provide a comprehensive picture of all forms of wealth and could in the future provide a realistic alternative to our current model.

The review also highlighted the fact that only around a half of deaths result in a report of the assets held by the deceased for probate or IHT purposes. A consequence is that the production of estimates of the distribution of marketable wealth requires data from sources other than from estates. Assessing the quality of these additional sources and how the model treats them was a key aspect of the review.

## **Key Findings**

**Mortality Ratios.** The wealth model controls for the fact that wealth and mortality risk are correlated by using data from the ONS Longitudinal Study on the differences in mortality risk between those living in owner-occupation and those who do not. If no allowance was made for this, the model would underestimate the number of wealthy individuals in the living population.

The method used to control for the correlation between wealth and mortality is fairly crude but sensitivity analysis conducted as part of the review suggests the chosen method has only a minor impact on the key measures of the distribution of personal wealth. We expect ELSA and the new ONS Household Asset Survey to provide direct evidence of the link between mortality and wealth which could be used within the model to improve the treatment of this effect.

**Valuation and Coverage Adjustments.** A difficulty with using data from IHT and probate records is that the values captured and the coverage of assets at death may not be entirely consistent with those of the living population. To correct for these factors a number of valuation and under-reporting adjustments are made to the data. More details are provided in the introductory note to the statistics.

The current choice of adjustments for under-reporting and valuation are based on the expert opinion of Inheritance Tax operational staff. Evidence with which to support or improve the assumptions would help to reduce any concern about the robustness of this aspect of the model but it is not easy to obtain.

**Trusts.** Wealth held in Discretionary Trusts does not appear in the data from estates so the wealth model makes an allowance for this by allocating an amount of trust wealth to a representative number of individuals within the population. Evidence collected in the review suggests that the estimate of the total value of wealth held in Discretionary Trusts should be increased, and that the wealth should be allocated across a smaller proportion of the population.

**Probate.** A key element of our current approach relates to the assumptions we make about the wealth of those whose estates will not require probate on death (broadly small estates or those where jointly held property can pass by survivorship). We plan to undertake a fuller review of the circumstances under which estates do and do not go through probate to determine whether our approach remains sound. In particular we need to improve our understanding of how the circumstances under which an estate does or does not require probate may have changed over time.

**Small Estates.** The wealth held by those whose estates would be too small to require probate is imputed using evidence from a number of household surveys. The method used to do this is crude and although this has little consequence for measures of distribution like the Gini or the proportion of wealth held by the top 1%, 5% or 10%, it does suggest that measures such as the proportion of the population with wealth in excess of £5,000 or £10,000 are likely to be particularly unreliable. The wealth model is not a suitable source of information on the level of savings held by those at the bottom of the wealth distribution.

**Joint Property.** A key question for the robustness of the results relates to the validity of the assumption that the excluded joint property owners are essentially similar to joint property owners within the identified population. As well as improving our understanding of the circumstances under which estates do and do not pass through probate, we should urgently consider whether the new ONS Household Assets Survey offers a suitable route to improve our assessment of the distribution of wealth held by the excluded joint property population.

### **Issues arising from the Consultation**

**Timeliness.** Our statistics are based on the year of death and as a consequence there is lag of almost two years before figures for a given year are published. We believe that the production of figures on the basis of year of death remains the most robust basis for producing statistics based on the estates multiplier method. Statistics produced using alternative methodologies or sources would also be subject to delay.

**Geographical breakdown.** A breakdown of our wealth statistics by geographic region was requested. We have recently begun to systematically collect data on the geographic region of the deceased and hope to be able to produce more regional breakdowns of our statistics in the future.

**Pension wealth.** More detailed information on pension assets was requested in the consultation. While acknowledging the importance of this element of wealth a detailed examination of this issue has proved to be beyond the scope of this review. ELSA, and the new ONS Household Asset Survey will help with this.

**Liabilities.** A response to the consultation suggested that greater disaggregation of liabilities would be useful. We are constrained from doing this by the quality of the data available from estates. The estates multiplier approach also has difficulty with adequately capturing levels of debt because of the prevalence of insurance policies which pay off debts on death.

### **Conclusions**

The review reaffirmed our view that the estates multiplier approach remains the best available means of assessing the distribution of personal wealth, although with the proviso that when data from the new ONS Household Assets Survey becomes available that conclusion should be urgently reviewed. In particular, the current approach seems particularly suited to identifying the wealth held by those at the top of the wealth distribution.

While affirming the validity of the broad approach the review did highlight numerous elements of the current methodology where improvement might be possible, or where weaknesses in the quality of the data suggest that particular statistics are less reliable than others.

Our expectation is that the Household Assets Survey will allow us to improve or

replace many aspects of the model which currently cause concern. Our view is therefore that it would not be a sensible use of resources to attempt major reform of the model before data from that survey becomes available. We therefore intend to continue to produce the statistics we currently publish using the existing methodology, although the various caveats highlighted in this summary should be noted.

Knowledge, Analysis and Intelligence Directorate  
HMRC  
June 2007

## **Annex 1: Summary of the Current Methodology and Alternatives**

### **Basic Methodologies**

The Royal Commission on the Distribution of Income & Wealth 1975 (RCDIW) considered three sources of information that could be used in estimating the size distribution of personal wealth:

1. The estate multiplier method;
2. The investment income approach;
3. The sample survey method.

Each of the methodologies mentioned above has deficiencies and weaknesses.

#### **1. The estate multiplier method**

This uses the estates of people who die during a year as a sample of the wealth of the living. Knowing the age at death of a person who left the estate, it is possible to assess the chance of dying at that age and estimate total personal wealth by multiplying the values of estates ordered into sex and age groups by the reciprocals of the appropriate mortality rates. The same method can be used to estimate the number of wealth owners. Various adjustments are then made to take account of individuals and assets that are not available in the estates' data. This methodology is described in more detail later in this Annex.

#### **2. The investment income approach**

This method attempts to use the data on income accruing from investments to determine the underlying asset values and their distribution by capitalising the flows of income. A study in 1974<sup>1</sup> employed the investment income approach with the following method:

- Estimates were made of the yields on various different types of assets using the range of assets classified by IR in the estate multiplier estimates.
- From these, weighted averages were derived appropriate to each wealth range, since the assets form varying proportions of total wealth according to the range of wealth considered.
- The weighted average yields were then multiplied by average wealth in each range and plotted graphically, so that for each level of investment income, it was possible to read off the level of wealth to which this corresponded.
- The yield multipliers were then applied to the investment income from the tax returns.

This has the advantage that it enables linking data on the distribution of income and wealth. It does, however, have some fundamental problems. Firstly, data on investment income is not complete for the whole population. It is, however, a lot better than it has been in the past. Secondly, not all assets yield a flow of money income and so it is difficult to incorporate these into the estimated distribution of wealth. Owner occupied houses constitute a very

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<sup>1</sup> Atkinson AB & Harrison AJ "Wealth Distribution and Investment Income in Britain" Review of income and Wealth (June 1974)

important example of such assets. Thirdly, these estimates are highly sensitive to the asset yields chosen and these will vary across assets and potentially individuals.

### **3. The Sample Survey Method**

Information on personal wealth holdings can be collected on a voluntary basis in response to sample surveys. In principle a survey could be designed to be representative of the whole population; to cover assets which are excluded or inadequately covered in estate duty data, such as life annuities and household goods; and to give information relating to the wealth of the living rather than that of the dead. A survey would also provide the opportunity to collect data on different units such as families or households rather than estates. It would also be possible to collect data on incomes and provide a link between income and wealth.

A major difficulty with this is that response rates are likely to differ across wealth ranges. There is evidence that unwillingness to co-operate is particularly strong among the more wealthy, so that higher wealth groups are under represented in the survey results. Another difficulty, even where a response is obtained, is that the results may be unreliable and understate wealth holdings as those who do co-operate may be unable or unwilling to give exact details. Such surveys also call for considerable effort and patience from the respondents who are expected to be familiar with the full details of their current financial situation. The concept of a wealth survey has been explored many times, most recently by the ONS. In the past it was found that a single interview was inadequate for probing the finances of the very rich so that the survey method was of limited applicability to that group. Ideally, as wealth is concentrated towards the top few percent of holders, they should be more intensively sampled than the rest of the population to achieve adequate representation. It is also not straightforward to stratify the sample as these upper wealth holders are not easily identifiable. The ONS, in conjunction with HMRC and a consortium of other government departments, are currently (2005) developing a national household survey of wealth & assets.

The RCDIW concluded that in estimating the value of wealth owned by the population as a whole, the personal sector balance sheet approach was likely to yield the most reliable results. Of the three methods described above to examine the size distribution of personal wealth it was concluded that the estate multiplier was the most useful. This is the method used to produce HMRC's estimates of the distribution of personal wealth. The three methods, having different strengths and weaknesses, are however complementary to each other and would provide interesting comparisons if all three were measured.

### **IRS Methodology Overview**

Analysis receives data from Capital Taxes Office (CTO), Nottingham; which contains asset details for a sample of:

1. IHT tax paying estates;
2. large valued estates relieved of IHT because of exemption; and
3. smaller estates (called excepted estates);

Cases which fall into categories (1) and (2) have to fill in form IHT200. These details are captured by Nottingham and they are sampled monthly. No information is automatically

available from Nottingham for cases in category (3). Analysis receives summary information on all deaths for which probate has been granted and a sample of these is chosen and details sent to Nottingham. They then request the probate forms (IHT205) from the probate office and capture the asset details into their database. These are transferred to Analysis as part of the above monthly download. Ideally we would receive all the asset details direct from probate, as this would obviate the need for Nottingham to have to sample cases that they have no interest in. This is not possible, however, because all of the information required is not held electronically.

## **Identified Wealth**

The sampled estate data can be grossed up to the whole probate population, approximately 40% of deaths. This in turn can be grossed up to the living population, who would have to go through probate if they were to die, to give 'Identified Wealth'. This equates to about 37% of the UK adult (>18) population. This assumes that the dead are a random sample (within the strata below) of the living. Of course there may be a number of reasons why this might not be the case. For instance the deceased may well have spent down some of their assets on medical products or care. This grossing up is done by:

- sex;
- age;
- marital status;
- country ; and
- social class.

Data for the first four criteria are available for probate/IHT cases and from the Government Actuary's Department (GAD) for the population and deaths. The fifth criterion, social class, also affects mortality, but it is not possible to identify this from probate/IHT records. A proxy is used for social class by applying one set of grossing factors to estates above a certain wealth 'cut-off' and another set to those below. The cut-off is currently set at £25k. The number of individuals living in owner-occupied accommodation is estimated from the General Household Survey (GHS) and the cut off point is set on the assumption that most but not all of these are in the identified population. The social class element of the grossing factors is obtained from the Office for National Statistics (ONS) Longitudinal Study. The mortality rates of those above the cut-off are assumed to be similar to those obtained for people living in owner occupied housing. For those estates below the cut-off, the multipliers are assumed to be halfway between those used for larger estates and those for the population as a whole. This adjustment is therefore based on the premise that wealth, owner occupation and social class are all directly correlated.

Identified wealth includes all individuals and assets that are reported for IHT/probate purposes. Probate is needed in order for a deceased person's representative to administer the assets in the estate. This normally only applies to estates which contain real property and/or a single class of asset worth £5,000 or more. Domiciled or 'deemed domiciled' individuals are liable for inheritance tax on their world-wide assets and so need to report all of these for probate/IHT. Furthermore any individual with assets held in the UK would require a grant of probate when they die in order for their representative to gain control of those UK assets. Non-domiciles therefore only appear in the data if they have UK based assets and only those assets need be reported.

The production of these statistics is hugely dependent on information collected for administrative purposes and as such it is sensitive to changes in those administrative processes. Where the process is about the calculation and collection of tax due, there is a further dimension that must be considered. Tax mitigation may affect the data that is

collected about some estates. One of the simplest and most generous reliefs available for IHT is on gifts. Assets given away at least seven years before death do not constitute part of the donor's estate. This is an inexact science, but the wealthy especially may be able to take advantage of this in giving away a substantial amount of their assets. The assets that are transferred, however, will belong to someone else and will appear in their estate when they die, so this may not be a problem as long as the wealth is not continually passed on so that it never appears as a part of anyone's estate.

Some assets that are transferred into trust will not appear to be owned by a particular individual even though they receive benefits from those assets. There are two separate issues here, firstly transfers into offshore trusts; and secondly, transfers into discretionary trusts. For large enough transfers into discretionary trusts there is an IHT charge payable when assets are settled and then a ten-yearly charge as well as an exit charge if the assets are removed from the trust structure. We therefore do have some information on the value of some, large enough, trusts, although a subset of discretionary trusts, Accumulation and Maintenance trusts, are exempt from IHT. As the trustees have control of the assets it is not possible to attribute the assets held in discretionary trusts to individuals.

### **Marketable Wealth**

Marketable wealth is an attempt to extend the identified wealth to cover the wealth of the whole adult population. It includes all forms of wealth except pensions and human capital and was a concept endorsed by the 1975 RCDIW. Basically this concept combines other sources of data and uses assumptions to extend identified personal wealth to the wealth of the whole adult population. This also corrects for known deficiencies in Identified wealth.

A correction is made for valuation and under-recording in the identified wealth. This is because the CTO only has a limited interest in obtaining correct values for estates which are below the IHT threshold. It is therefore assumed that there will be some under-reporting (deliberate/accidental/additional assets discovered and not declared) in sub threshold estates. The main categories affected are dwellings and cash. Also, where property is held jointly, a half portion will be worth less than half the value of the whole. Experts from CTO Nottingham inform these assumptions.

Identified wealth covers around 40% of deaths. Marketable wealth attempts to cover wealth for the other 60% of adults. Estimates are therefore made for cases/assets which by-pass probate. These can broadly be split into three categories:

- assets in discretionary trusts;
- estates above the probate limit but where probate is not required as the property passes automatically to the other joint owner;
- estates below the probate limits.

### **Trusts**

The value of assets held in discretionary trusts is estimated from an old survey (Rogers and Timmins)<sup>2</sup> conducted in 1986. This used an income multiplier approach for income bearing assets while the value of other, non-income bearing, assets was estimated by district valuers for a sample of trusts. The 1986 value is up-rated with changes in equity prices to provide estimates for later years. This assumed wealth in trusts is then randomly allocated to 60% of the identified population who already have wealth over £200,000.

### **Joint Property**

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<sup>2</sup> Robson MH and Timmins RK. Discretionary Trusts - A Research Study (1988)



Probate is required so that the deceased's representative can gain control of the assets in the deceased's estate for administrative purposes. Where property is held under a joint tenancy (by two or more owners), where on the death of one joint owner the ownership passes automatically to the surviving joint owner(s), probate is not required. Estates including joint property will only be in probate if there are other substantial assets (at least £5,000 in an asset class) which require probate. So, unless there are other assets in an estate which require probate or the estate has an IHT liability (for instance if the joint owners do not qualify for spouse relief and the property value is high enough) then these assets/individuals will not be in the identified population.

The model splits this population into two groups; it splits out ex-council-house owners and deals with them separately. ODPM provided the numbers of sales to owner-occupiers by local authorities, new towns and housing associations. It is assumed that 90% of these houses would be found in the excluded population. Estimates were also provided of the average values and of the discounts. It is assumed that the mortgages would be for 90% of the discounted price at the time that the house was purchased, but the value would be the current full value of the house. The additional assets of these people (other than dwellings and mortgages) are assumed to be about half way between those of the second joint property owners group and those of non-retired people living in unfurnished rented accommodation (small estates - see below) with minor adjustments for life policies.

The value of dwellings owned by the remainder of this population is estimated using the difference between the ONS balance sheet estimate of household wealth in dwellings and the wealth in dwellings of the identified population (including the ex council house owners). The number of joint property owners is estimated using data from the ONS General Household Survey (GHS). This is compared to the number of joint property owners in the identified population in order to estimate the number of 'excluded' joint property owners. The value of other assets held by these individuals is assumed to be the same, on average as those individuals in the identified population who meet the small payments requirements but choose not to use them. (i.e. those deaths where the estate was small enough to bypass probate, but went through probate nonetheless)

### **Small Estates**

The number of living people with insufficient assets to require probate is estimated as the difference between the UK adult population and the identified population plus excluded joint property owners. In 1985 the average value of assets held by this group was estimated using three sources:

- Estimates of amounts in bank and building society accounts and national savings were made using data derived from the Family Expenditure Survey.
- Relative sizes of debt were estimated from a study by the Policy Studies Institute<sup>3</sup>.
- It was assumed that the average for small estates would be about half the average for those small estates in the identified population who meet the small payments requirements but choose not to use them.

These asset values estimated in 1985 are up-rated by 90% of the RPI each year to obtain current estimates.

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<sup>3</sup> Berthoud R and Kempson E. Credit and Debt in Britain 1990 (1990)